

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

CRUSOE ENERGY SYSTEMS LLC,

PLAINTIFF,

v.

UPSTREAM DATA INC.,

DEFENDANT.

Case No: 2:25-cv-743

**JURY TRIAL DEMANDED**

**COMPLAINT**

Plaintiff Crusoe Energy Systems LLC (“Crusoe”), by its undersigned counsel, brings this patent infringement action against Defendant Upstream Data, Inc. (“Upstream”). Crusoe alleges, based on personal knowledge with respect to its own actions and upon information and belief with respect to all others’ actions, as follows:

**PARTIES**

**A. Plaintiff**

1. Plaintiff Crusoe is a limited liability company organized and existing under the laws of the State of Delaware with a place of business at 255 Fillmore Street, Denver, Colorado 80206.

2. Crusoe provides oil and gas companies with a fast, low-cost, and simple solution to natural gas flaring.

**B. Defendant**

3. Defendant Upstream is a Canadian corporation with its principal place of business located at 4702 40 Ave., Lloydminster, Canada, S9V 2B6.

4. Upstream operates and transacts business extensively within the United States, including within the Eastern District of Texas relating to the facts of this case.

### **NATURE OF THE ACTION**

5. This is a civil action against Upstream for patent infringement under the United States patent laws, as amended, 35 U.S.C. §§ 101 *et seq.* (the “Patent Laws”), involving U.S. Patent No. 11,451,059 (the “’059 Patent”), U.S. Patent No. 10,862,307 (the “’307 Patent”), U.S. Patent No. 10,862,309 (the “’309 Patent”), and U.S. Patent No. 11,437,821 (the “’821 Patent”) (collectively, the “Asserted Patents”). This Court has personal jurisdiction over Upstream because Upstream has committed or participated in the tortious act of patent infringement in Texas under 35 U.S.C. § 271 that has led to harm and injury to Crusoe and will lead to further foreseeable harm and injury to Crusoe.

6. The ’307 Patent was filed on August 1, 2019, as U.S. Pat. Appl. No. 16/529,152 and, on its face, claims priority to an earlier application filed on August 1, 2018. *See* Ex. 1 (fields 21, 22, 60). The ’307 Patent, entitled “Systems and Methods for Generating and Consuming Power from Natural Gas,” was duly and legally issued by the U.S. Patent and Trademark Office on December 8, 2020. *Id.* (fields 45, 54). The named inventors of the ’307 Patent are Charles Cavness, Chase Lochmiller, and Kenneth Parker. *See id.* (field 72). Crusoe is the current lawful owner of the ’307 Patent and has the full and exclusive right to bring an action and recover damages for infringement of the ’307 Patent. A true and correct copy of the ’307 Patent is attached hereto as Exhibit 1.

7. The ’309 Patent is a continuation of the ’307 Patent. The application for the ’309 Patent was filed on November 25, 2019 as U.S. Pat. Appl. No. 16/694,883 and, on its face, claims priority to an earlier application filed on August 1, 2018. *See* Ex. 2 (fields 21, 22, 60, 63). The ’309 Patent, entitled “Systems and Methods for Generating and Consuming Power from Natural Gas,” was duly and legally issued by the U.S. Patent and Trademark Office on December 8, 2020. *See id.* (fields 45, 54). The named inventors of the ’309 Patent are Charles Cavness, Chase Lochmiller,

and Kenneth Parker. *See id.* (field 72). Crusoe is the current lawful owner of the '309 Patent and has the full and exclusive right to bring an action and recover damages for infringement of the '309 Patent. A true and correct copy of the '309 Patent is attached hereto as Exhibit 2.

8. The '821 Patent is in the same family as the '307 Patent and '309 Patent. The application for the '821 Patent was filed on January 13, 2022 as U.S. Pat. Appl. No. 17/575,506 and, on its face, claims priority to an earlier provisional application filed on August 1, 2018. *See* Ex. 3 (fields 21, 22, 60, 63). The '821 Patent, entitled "Systems and Methods for Generating and Consuming Power from Natural Gas," was duly and legally issued by the U.S. Patent and Trademark Office on September 6, 2022. *See id.* (fields 45, 54). The named inventors of the '821 Patent are Charles Cavness, Chase Lochmiller, and Kenneth Parker. *See id.* (field 72). Crusoe is the current lawful owner of the '821 Patent and has the full and exclusive right to bring an action and recover damages for infringement of the '821 Patent. A true and correct copy of the '821 Patent is attached hereto as Exhibit 3.

9. The '059 Patent is in the same family as the '307 Patent and '309 Patent. The application for the '059 Patent was filed on January 13, 2022 as U.S. Pat. Appl. No. 17/575,483 and, on its face, claims priority to an earlier provisional application filed on August 1, 2018. *See* Ex. 4 (fields 21, 22, 60, 63). The '059 Patent, entitled "Systems and Methods for Generating and Consuming Power from Natural Gas," was duly and legally issued by the U.S. Patent and Trademark Office on September 20, 2022. *See id.* (fields 45, 54). The named inventors of the '821 Patent are Charles Cavness, Chase Lochmiller, and Kenneth Parker. *See id.* (field 72). Crusoe is the current lawful owner of the '059 Patent and has the full and exclusive right to bring an action and recover damages for infringement of the '059 Patent. A true and correct copy of the '059 Patent is attached hereto as Exhibit 4.

10. Upstream has and continues to (1) directly infringe at least one claim of each of the Asserted Patents by making, using, selling, offering for sale, and/or importing into the United States, directly or through intermediaries, certain flare gas mitigation products and services (“Accused Products”); and (2) induce users of its flare gas mitigation products and services to infringe at least one claim of each of the Asserted Patents. *See* Ex. 5 (’307 Patent claim chart showing Upstream’s infringement); Ex. 6 (’309 Patent claim chart showing Upstream’s infringement); Ex. 7 (’821 Patent claim chart showing Upstream’s infringement); Ex. 8 (’059 Patent claim chart showing Upstream’s infringement).

11. Further, Upstream willfully infringes at least one claim of the Asserted Patents because, as described below, Upstream knows or should know of Crusoe’s innovations and Asserted Patents. With this knowledge, Upstream intentionally engaged in conduct it knew or should have known would infringe or cause infringement of one or more claims of the Asserted Patents.

12. Crusoe seeks monetary and injunctive relief under the Patent Laws.

### **JURISDICTION AND VENUE**

13. This Court has subject matter jurisdiction over Crusoe’s claims for patent infringement pursuant to 35 U.S.C. §§ 101 *et seq.* and 28 U.S.C. §§ 1331, 1338, and 1400. The Court also has subject matter jurisdiction under 28 U.S.C. § 1332 (diversity jurisdiction) because the parties are citizens of different states and the amount in controversy exceeds \$75,000.

14. This Court has specific and general personal jurisdiction over Upstream consistent with the requirements of the Due Process Clause of the United States Constitution and the Texas Long Arm Statute, due at least to Upstream’s substantial business in this forum, including (i) at least a portion of the infringement alleged herein is in this District; (ii) Upstream’s commission of a tort in this District as alleged herein; and/or (iii) regularly doing or soliciting business, engaging

in other persistent courses of conduct, or deriving substantial revenue from contractual agreements, goods and services provided to customers in this District.

15. Specifically, Upstream is doing business in Texas by selling the Accused Products to residents of this District and committing acts of patent infringement in this District.

16. Upstream knows, or should know, and intends that its infringing activities will displace sales of Crusoe product causing injury to Crusoe in this District.

17. It is a proper exercise of judicial power in this District to stop Upstream's planned, non-speculative harmful conduct. There exists a causal nexus between Upstream's infringement of the Asserted Patents and the harm to Crusoe.

18. Venue is proper in this District pursuant to 28 U.S.C. § 1391(b)(2) because Upstream is a foreign corporation that has committed acts of patent infringement in this District. *See also* 28 U.S.C. § 1391(c)(3). A substantial part of the events giving rise to the claims at issue are taking place in this District.

### **FACTUAL ALLEGATIONS**

#### **I. The Technology**

19. In 2018, Denver natives and grade-school friends Charles Cavness ("Charles") and Chase Lochmiller ("Chase") first conceived of Crusoe while hiking in the Rocky Mountains discussing Chase's recent summit of Mt. Everest.

20. After graduating high-school, Charles went to Middlebury College to study geology and entrepreneurship. He then went on to work in natural gas consulting.

21. Meanwhile, Chase attended MIT and gained exposure to the distributed network computing and financial services industries. Eventually, he entered into cryptocurrency investing.

22. Through their work, both Charles and Chase became increasingly aware of and concerned with the negative environmental impacts of their respective industries.

23. Specifically, through his work in natural gas consulting, Charles became increasingly aware of the negative environmental impacts of oil and gas production. In particular, Charles was concerned by the industry's usual approach to handling the excess natural gas generated during crude oil extraction. Unless an oil well is connected to a gas pipeline, it is difficult and expensive for well operators to transport the excess gas to market, thus, the natural gas becomes "stranded." So, rather than storing or capturing the stranded gas, it is burned on site. This process is known as "flaring."

24. As detailed in the Asserted Patents, an estimated 35 billion cubic feet of natural gas was flared in 2016, which is enough natural gas to provide the energy needed to power 6 million homes. *See* Ex. 1 at 1:52-55. Worse still, over a 20-year period, methane is 80 times more potent than carbon dioxide in terms of its global warming impact. *See* Ex. 9 at 1 (*Methane emissions are driving climate change. Here's how to reduce them.*, UN ENVIRONMENT PROGRAMME (Aug. 20, 2021)).

25. Similarly, Chase came to learn that cryptocurrency mining is an energy intensive process. As detailed in the Asserted Patents, cryptocurrency mining consumes approximately 29 TWh of electricity each year (and likely growing every year), which is equivalent to the power demand of Germany—the largest industrial economy in Europe. *See* Ex. 1 at 2:25-33.

26. During their 2018 hike in the Rocky Mountains, Charles and Chase discussed their shared environmental concerns and the issues posed by their respective industries. They ultimately came to understand that (a) oil and gas would continue to play a vital role in supporting human civilization because a complete transition to renewable energy would take time, and (b) the global cryptocurrency phenomena would continue to demand significant energy resources to sustain the blockchain.

27. Charles and Chase had a “lightbulb” moment, realizing they could solve both problems at once by harvesting stranded natural gas to offset the energy consumed during cryptocurrency mining. Based on that “lightbulb” moment, Charles, Chase, and co-inventor Kenneth Parker (collectively, “the Inventors”) conceived of the Digital Flare Mitigation<sup>®</sup> system, which harnesses stranded natural gas to create on-site power that supports intensive computing functions, such as Bitcoin mining, artificial intelligence, and related functions performed with a distributed computing system.

28. In short, the Inventors engineered a win-win-win-win solution enabling them to (a) eliminate a wasteful practice, (b) off-set an energy intensive computing process, (c) reduce strain on the electricity grid, and (d) amass cryptocurrency assets at the same time.

## **II. Crusoe**

29. In 2018, Charles and Chase founded Crusoe—a young company which has been at the forefront of flare gas mitigation technology. Crusoe’s mission has been to provide innovative solutions to eliminate natural gas flaring, reduce the cost of computing, and minimize the carbon emissions that accelerate climate change.

30. In the process, Crusoe has pioneered clean computing infrastructure that reduces both the cost and environmental impact of the world’s expanding digital economy. Its Digital Flare Mitigation<sup>®</sup> systems avoid 16,120 tons of carbon dioxide-equivalent emissions each year—almost three times the emissions avoided by wind and solar energy combined—and eliminate up to 98% of methane emissions generated by oil and gas production relative to continued flaring. Powered by stranded natural gas, Crusoe’s cloud computing system provides developers with powerful, reliable network solutions, while simultaneously enabling their organizations to make measurable progress toward their environmental goals.

31. As a result of its innovative systems, Crusoe has earned contracts and partnerships with many of North America's oil and gas operators and energy providers.

32. In addition, Crusoe and the Inventors have earned national recognition for their innovations. The Colorado Technology Association awarded Crusoe with the APEX Award for Emerging Technology Company of the Year in 2021—a prestigious honor awarded to Colorado's most innovative technology company which has operated less than five years. *See* Ex. 10 (*Colorado Technology Association Announces Crusoe Energy Systems As Winner of Emerging Technology Company of the Year APEX Award*, BusinessWire (Feb. 3, 2021)). In the same year, Charles was named Entrepreneur of the Year Mountain Desert Region by Ernst & Young LLP, while Goldman Sachs recognized Chase as one of the 100 Most Intriguing Entrepreneurs of 2021 at its annual Builders + Innovators Summit. *See* Ex. 11 (*EY Announces Winners For The Entrepreneur of the Year 2021 Mountain Desert Region Award*, Crusoe Energy Blog (Jul. 28, 2021)); Ex. 12 (*Crusoe Energy Honored By Goldman Sachs for Entrepreneurship*, Crusoe Energy Blog (Oct. 21, 2021)). The founders have been regularly invited to speak at industry trade shows to tell the story of building Crusoe and developing Crusoe's pioneering Digital Flare Mitigation<sup>®</sup> system.

33. Crusoe's innovations in the field have also been featured by numerous publications and organizations, including *Bloomberg*, *CNBC*, *Forbes Magazine*, and even *Sierra*—the magazine of the Sierra Club. *See* Ex. 13 (Trung Phan, *Methane is a Big Climate Problem That Bitcoin Can Help Solve*, BLOOMBERG (May 3, 2022)); *How Crusoe Energy Systems uses excess natural gas to power crypto mining rigs*, CNBC, available at <https://www.cnbc.com/video/2022/04/05/crusoe-energy-systems-crypto-mining.html> (Apr. 5, 2022) (video interview); Ex. 14 (Chris Helman, *'Green Bitcoin Mining': The Big Profits In Clean*



*Crypto*, FORBES MAGAZINE (Aug. 2, 2021)); Ex. 15 (Tom Cassauwers, *An Environmental Upside to Bitcoin?*, SIERRA (Mar. 30, 2021)).

34. Crusoe has invested hundreds of millions of dollars in the research and development of its flare gas mitigation solutions, and the resultant intellectual property is one of Crusoe’s most important assets. Crusoe has obtained patent protection for some of its innovations, and is continuing to seek patent protection for others. For example, Crusoe’s innovative Digital Flare Mitigation<sup>®</sup> system practices—and is thus protected by—one or more claims of the Asserted Patents.

35. The claims in Crusoe’s Asserted Patents recite novel systems and implementations for gas flare mitigation that specifically address technical problems in this field. For instance, the claims recite, *inter alia*, configurations that were unconventional in the prior art, such as automatically controlling the electrical load of the distributed computing units based on operational parameters of the power generation module (Ex. 4 at 28:28-35 (’059 patent, claim 1); *see also id.* at 17:8-20), including a “parallel panel” to “combine and synchronize” the electrical outputs from multiple power generation modules for larger-scale, multi-generator applications (Ex. 1 at 28:12-19 (’307 patent, claim 1); Ex. 3 at 28:17-24 (’821 patent, claim 1), *see also* Ex. 1 at 4:30-34, 15:26-36, 18:62-19:40, Fig. 4), and automatically controlling the electrical load of the distributed computing system based on the “gas profile of the fuel gas received by the electrical power generation system” (Ex. 2 at 28:41-49 (’309 patent, claim 1); *see also id.* at 7:5-26).

### **III. Upstream**

36. Upstream is a Canadian company founded by Steve Barbour that, on information and belief, manufactures, sells, imports, and operates equipment for generating electricity using natural gas and using that electricity to mine bitcoin. One of Upstream’s products is the so-called “Hash Generator,” which Upstream describes it as a “[n]atural gas generator + loadcenter in a

complete, plumb & play skidded package!” Ex. 16 at 1 (<https://upstreamdata.com/hash-generator/>).

37. According to Upstream’s website, there are “Hundreds of Hash Generators all over North America.” *Id.* at 9. Upstream regularly advertises through social media that it is selling products for installations in Texas, including in the Eastern District. *See* Ex. 17; Ex. 18; Ex. 19.

38. For instance, Upstream’s website explains that it has engaged with Giga Energy Solutions, who “utilizes stranded natural gas to power bitcoin miners” and “Upstream Data’s portable mining solutions enable this innovation.” Ex. 18 at 1 (<https://upstreamdata.com/bitcoin-mining-revolutionizes-oil-and-gas-industry-upstream-data-leads-the-way/>). According to Upstream’s website, Giga operates in “East Texas oil fields.” *Id.* This corresponds with other publicly available information indicating Giga has a “shop” in Beaumont, Texas (in this District) and has “sites in East Texas.” Ex. 19 at 4, 10 (<https://www.cnn.com/2022/02/12/23-year-old-texans-made-4-million-mining-bitcoin-off-flared-natural-gas.html>).

39. Upstream has known of Crusoe’s technology and patents for years. For instance, in a complaint Upstream filed against Crusoe in the District of Colorado, Upstream acknowledged “Crusoe’s patent applications,” specifically naming “U.S. Pat. App. No. 16/529,152” which was the application that matured into the ’307 patent. Ex. 1 (field 21).

40. Upstream recognized Crusoe’s proactivity in protecting its intellectual property by recognizing a prior suit Crusoe had filed against Alkane Midstream LLC, who Upstream admits was “a customer of Upstream.” Ex. 20, ¶ 6, 22. Crusoe alleged that Upstream’s customer, Alkane, infringed the same asserted patents as involved in this Complaint—the ’059 patent, the ’307 patent, the ’309 patent, and the ’821 patent. Ex. 21, ¶ 6. That lawsuit ended in settlement. *Crusoe Energy*

*Systems LLC v. Alkane Midstream LLC*, Case No. 1:22-CV-02142, D.I. 95 (D. Colo. Mar. 16, 2023) (Joint Motion to Dismiss with Prejudice “pursuant to an executed settlement agreement”).

41. Upon information and belief, as a result of these activities, Upstream had actual knowledge of the Asserted Patents, or was willfully blind to the Asserted Patents, before service of this Complaint.

42. In addition, Upstream has actual knowledge of the Asserted Patents by virtue of the service of this Complaint and as of, at the latest, the date it received notice.

### **CAUSES OF ACTION**

#### **COUNT ONE:**

#### **UPSTREAM’S INFRINGEMENT OF U.S. PATENT NO. 11,451,059**

43. Crusoe incorporates all previous paragraphs by reference as if fully set forth herein.

44. Upstream has directly infringed and continues to infringe at least claim 1 of the ’059 Patent by making, using, offering for sale, selling, and/or importing products, including at least the Accused Products, that meet every limitation of those claims, either literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271(a). *See* Ex. 8.

45. To the extent specific components of the Accused Products are provided and/or operated by Upstream’s customers, vendors or agents, Upstream infringes at least claim 1 of the ’059 Patent jointly with its customers, vendors, or other agents. On information and belief, Upstream directs and controls the infringing act(s) of one or more third-parties by establishing the manner and timing of the one or more third parties’ infringing act(s) and conditioning the participation of an activity or receipt of a benefit upon completion of the infringing act(s). Thus, Upstream and the one or more third-parties jointly infringe the ’059 Patent.

46. With knowledge of the ’059 Patent, Upstream will actively induce, has actively induced, and continues to induce, its customers and/or end users of the Accused Products to

directly infringe one or more claims of the '059 Patent, including claim 1, in violation of 35 U.S.C. § 271(b).

47. Upstream has induced such customers and/or end users to infringe by selling, aiding, providing support for, providing instructions for use of the Accused Products, and/or otherwise encouraging its customers and/or end-users to make, use, sell, or offer for sale the Accused Products to directly infringe, either literally and/or under the doctrine of equivalents, one or more claims of the '059 Patent, including claim 1.

48. As a result of Upstream's inducement, its customers and/or end users operate and/or use the Accused Products, in ways that directly infringe at least one claim of the '059 Patent. Upstream had actual knowledge of its customers' and/or end users' direct infringement at least by virtue of its sales, instruction, and/or otherwise promotion of the Accused Products, as set forth above.

49. As discussed above, Upstream has actual knowledge of the '059 Patent (at least as of the original date of filing of this litigation), and with that knowledge willfully, deliberately, and intentionally infringed (and continues to infringe) the '059 Patent.

50. Crusoe is entitled to recover from Upstream damages at least in an amount adequate to compensate for Upstream's infringement of the '059 Patent, which amount has yet to be determined, together with interest and costs determined by the Court.

51. In addition, for the reasons discussed above, Upstream's infringement of the '059 Patent has been deliberate and willful, and an award of treble damages and attorney's fees is warranted at least under 35 U.S.C. §§ 284, 285.

52. Upstream will continue to infringe the '059 Patent unless and until it is enjoined by this Court. As a result of Upstream's unlawful activities, Crusoe has suffered and continues to

suffer irreparable harm. Crusoe has no adequate remedy at law against Upstream's acts of infringement and, unless Upstream is enjoined from its infringement of the '059 Patent, Crusoe will continue to suffer irreparable harm.

**COUNT TWO:**  
**UPSTREAM'S INFRINGEMENT OF U.S. PATENT NO. 10,862,307**

53. Crusoe incorporates all previous paragraphs by reference as if fully set forth herein.

54. Upstream has directly infringed and continues to infringe at least claim 1 of the '307 Patent by making, using, offering for sale, selling, and/or importing products, including at least the Accused Products, that meet every limitation of those claims, either literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271(a). *See* Ex. 5.

55. To the extent specific components of the Accused Products are provided and/or operated by Upstream's customers, vendors or agents, Upstream infringes at least claim 1 of the '307 Patent jointly with its customers, vendors, or other agents. On information and belief, Upstream directs and controls the infringing act(s) of one or more third-parties by establishing the manner and timing of the one or more third parties' infringing act(s) and conditioning the participation of an activity or receipt of a benefit upon completion of the infringing act(s). Thus, Upstream and the one or more third-parties jointly infringe the '307 Patent.

56. With knowledge of the '307 Patent, Upstream will actively induce, has actively induced, and continues to induce, its customers and/or end users of the Accused Products to directly infringe one or more claims of the '307 Patent, including claim 1, in violation of 35 U.S.C. § 271(b).

57. Upstream has induced such customers and/or end users to infringe by selling, aiding, providing support for, providing instructions for use of the Accused Products, and/or otherwise encouraging its customers and/or end-users to make, use, sell, or offer for sale the

Accused Products to directly infringe, either literally and/or under the doctrine of equivalents, one or more claims of the '307 Patent, including claim 1.

58. As a result of Upstream's inducement, its customers and/or end users operate and/or use the Accused Products, in ways that directly infringe at least one claim of the '307 Patent. Upstream had actual knowledge of its customers' and/or end users' direct infringement at least by virtue of its sales, instruction, and/or otherwise promotion of the Accused Products, as set forth above.

59. As discussed above, Upstream has actual knowledge of the '307 Patent (at least as of the original date of filing of this litigation), and with that knowledge willfully, deliberately, and intentionally infringed (and continues to infringe) the '307 Patent.

60. Crusoe is entitled to recover from Upstream damages at least in an amount adequate to compensate for Upstream's infringement of the '307 Patent, which amount has yet to be determined, together with interest and costs determined by the Court.

61. In addition, for the reasons discussed above, Upstream's infringement of the '307 Patent has been deliberate and willful, and an award of treble damages and attorney's fees is warranted at least under 35 U.S.C. §§ 284, 285.

62. Upstream will continue to infringe the '307 Patent unless and until it is enjoined by this Court. As a result of Upstream's unlawful activities, Crusoe has suffered and continues to suffer irreparable harm. Crusoe has no adequate remedy at law against Upstream's acts of infringement and, unless Upstream is enjoined from its infringement of the '307 Patent, Crusoe will continue to suffer irreparable harm.

**COUNT THREE:**  
**UPSTREAM'S INFRINGEMENT OF U.S. PATENT NO. 10,862,309**

63. Crusoe incorporates all previous paragraphs by reference as if fully set forth herein.

64. Upstream has directly infringed and continues to infringe at least claim 1 of the '309 Patent by making, using, offering for sale, selling, and/or importing products, including at least the Accused Products, that meet every limitation of those claims, either literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271(a). *See* Ex. 6.

65. To the extent specific components of the Accused Products are provided and/or operated by Upstream's customers, vendors or agents, Upstream infringes at least claim 1 of the '309 Patent jointly with its customers, vendors, or other agents. On information and belief, Upstream directs and controls the infringing act(s) of one or more third-parties by establishing the manner and timing of the one or more third parties' infringing act(s) and conditioning the participation of an activity or receipt of a benefit upon completion of the infringing act(s). Thus, Upstream and the one or more third-parties jointly infringe the '309 Patent.

66. With knowledge of the '309 Patent, Upstream will actively induce, has actively induced, and continues to induce, its customers and/or end users of the Accused Products to directly infringe one or more claims of the '309 Patent, including claim 1, in violation of 35 U.S.C. § 271(b).

67. Upstream has induced such customers and/or end users to infringe by selling, aiding, providing support for, providing instructions for use of the Accused Products, and/or otherwise encouraging its customers and/or end-users to make, use, sell, or offer for sale the Accused Products to directly infringe, either literally and/or under the doctrine of equivalents, one or more claims of the '309 Patent, including claim 1.

68. As a result of Upstream's inducement, its customers and/or end users operate and/or use the Accused Products, in ways that directly infringe at least one claim of the '309 Patent. Upstream had actual knowledge of its customers' and/or end users' direct infringement at least by

virtue of its sales, instruction, and/or otherwise promotion of the Accused Products, as set forth above.

69. As discussed above, Upstream has actual knowledge of the '309 Patent (at least as of the original date of filing of this litigation), and with that knowledge willfully, deliberately, and intentionally infringed (and continues to infringe) the '309 Patent.

70. Crusoe is entitled to recover from Upstream damages at least in an amount adequate to compensate for Upstream's infringement of the '309 Patent, which amount has yet to be determined, together with interest and costs determined by the Court.

71. In addition, for the reasons discussed above, Upstream's infringement of the '309 Patent has been deliberate and willful, and an award of treble damages and attorney's fees is warranted at least under 35 U.S.C. §§ 284, 285.

72. Upstream will continue to infringe the '309 Patent unless and until it is enjoined by this Court. As a result of Upstream's unlawful activities, Crusoe has suffered and continues to suffer irreparable harm. Crusoe has no adequate remedy at law against Upstream's acts of infringement and, unless Upstream is enjoined from its infringement of the '309 Patent, Crusoe will continue to suffer irreparable harm.

**COUNT FOUR:**  
**UPSTREAM'S INFRINGEMENT OF U.S. PATENT NO. 11,437,821**

73. Crusoe incorporates all previous paragraphs by reference as if fully set forth herein.

74. Upstream has directly infringed and continues to infringe at least claim 1 of the '821 Patent by making, using, offering for sale, selling, and/or importing products, including at least the Accused Products, that meet every limitation of those claims, either literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271(a). *See* Ex. 7.



75. To the extent specific components of the Accused Products are provided and/or operated by Upstream's customers, vendors or agents, Upstream infringes at least claim 1 of the '821 Patent jointly with its customers, vendors, or other agents. On information and belief, Upstream directs and controls the infringing act(s) of one or more third-parties by establishing the manner and timing of the one or more third parties' infringing act(s) and conditioning the participation of an activity or receipt of a benefit upon completion of the infringing act(s). Thus, Upstream and the one or more third-parties jointly infringe the '821 Patent.

76. With knowledge of the '821 Patent, Upstream will actively induce, has actively induced, and continues to induce, its customers and/or end users of the Accused Products to directly infringe one or more claims of the '821 Patent, including claim 1, in violation of 35 U.S.C. § 271(b).

77. Upstream has induced such customers and/or end users to infringe by selling, aiding, providing support for, providing instructions for use of the Accused Products, and/or otherwise encouraging its customers and/or end-users to make, use, sell, or offer for sale the Accused Products to directly infringe, either literally and/or under the doctrine of equivalents, one or more claims of the '821 Patent, including claim 1.

78. As a result of Upstream's inducement, its customers and/or end users operate and/or use the Accused Products, in ways that directly infringe at least one claim of the '821 Patent. Upstream had actual knowledge of its customers' and/or end users' direct infringement at least by virtue of its sales, instruction, and/or otherwise promotion of the Accused Products, as set forth above.

79. As discussed above, Upstream has actual knowledge of the '821 Patent (at least as of the original date of filing of this litigation), and with that knowledge willfully, deliberately, and intentionally infringed (and continues to infringe) the '821 Patent.

80. Crusoe is entitled to recover from Upstream damages at least in an amount adequate to compensate for Upstream's infringement of the '821 Patent, which amount has yet to be determined, together with interest and costs determined by the Court.

81. In addition, for the reasons discussed above, Upstream's infringement of the '821 Patent has been deliberate and willful, and an award of treble damages and attorney's fees is warranted at least under 35 U.S.C. §§ 284, 285.

82. Upstream will continue to infringe the '821 Patent unless and until it is enjoined by this Court. As a result of Upstream's unlawful activities, Crusoe has suffered and continues to suffer irreparable harm. Crusoe has no adequate remedy at law against Upstream's acts of infringement and, unless Upstream is enjoined from its infringement of the '821 Patent, Crusoe will continue to suffer irreparable harm.

#### **JURY DEMAND**

83. Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Crusoe demands a trial by jury on all issues triable of right by a jury.

#### **PRAYER FOR RELIEF**

84. Crusoe respectfully requests that the Court:

- a. Enter judgment in Crusoe's favor and against Upstream on all causes of action alleged herein;
- b. Adjudge that Upstream has and is infringing the Asserted Patents;
- c. Enter a permanent injunction restraining Upstream, and its agents, servants, employees, attorneys, successors and assigns, and all persons, firms, and

corporations acting in concert with it, from infringing the Asserted Patents, including an order enjoining the marketing, making, manufacture, sale, offer for sale, use, and/or importation of all Upstream products found to infringe;

- d. Award Crusoe damages in an amount adequate to compensate Crusoe for Upstream's infringement of the Asserted Patents;
- e. Adjudge that Upstream's infringement of the Asserted Patents has been willful;
- f. Award enhanced damages pursuant to 35 U.S.C. § 284;
- g. Enter an order finding that this is an exceptional case and awarding Crusoe its costs, attorney's fees, and expenses, whether under 35 U.S.C. § 285, or otherwise;
- h. Award pre-judgment and post-judgment interest on the damages awarded at the highest rate allowed by law;
- i. Order an accounting of all damages;
- j. Grant Crusoe such other and further relief, in law or in equity, as the Court may deem to be just and proper.

Dated: July 24, 2025

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